

Appl. No. : 09/720,041  
Filed : April 2, 2001

33. (New) A process as claimed in claim 32 wherein said substrate is sweet whey or sweet whey protein concentrate.

34. (New) A process as claimed in claim 32 wherein said protease is selected from the group consisting of Protease P6, Protease A, Protease M, Peptidase, Neutrase, Validase and AFP 2000.

35. (New) A process as claimed in claim 32 wherein said hydrolysis terminating step comprises heat deactivation.

36. (New) A process according to claim 35 wherein said heat deactivation comprises heating and hydrolysate for up to ten seconds to a temperature up to 95°C.

37. (New) A process according to claim 35 wherein said hydrolysis is conducted at a temperature of below 65°C, wherein said heat deactivating step is conducted at 65°C to 70°C for from 10 seconds to 15 minutes.

38. (New) A process according to claim 35 wherein said hydrolysis is conducted at a temperature below 60°C, wherein said heat deactivating step is conducted at 60° to 65°C for from 10 seconds up to 30 minutes.

39. (New) A process as claimed in claim 32 wherein said hydrolysis terminating step comprises altering the pH of said whey protein-containing substrate to a pH at which said protease is not active.

40. (New) A process as claimed in claim 39 wherein said hydrolysis terminating step includes heat deactivation.

Appl. No. : 09/720,041  
Filed : April 2, 2001

QNT  
A1

41. (New) A process as claimed in claim 32 wherein said hydrolysis terminating step comprises subjecting said hydrolysate to ultrafiltration with an ultrafiltration membrane having a nominal molecular weight cutoff in the range of 10-500kDa.

42. (New) A process as claimed in claim 32 wherein said enzyme is immobilised on an inert support during said hydrolysis step.

43. (New) A process as claimed in claim 42 wherein said inert support is Roehm Eupergit, carrageenan particles, chitosan particles or any other suitable inert support material.

44. (New) A process as claimed in claim 32 wherein the degree of hydrolysis is about 3-5%.

45. (New) A process as claimed in claim 32 wherein the substrate also contains lactose, in an amount of about 5% by weight or higher.

ans C5

46. (New) A process as claimed in claim 32 wherein said lactose content is about 10% by weight or higher.

47. (New) A process as claimed in claim 45 wherein the amount of lactose present in the substrate is up to about 30% by weight.

48. (New) A process as claimed in claim 45 wherein the amount of lactose present in the substrate is up to about 50% by weight.

Rev C6

49. (New) A process as claimed in claim 45, wherein the substrate is also treated with lactase and/or -galactosidase, either before, during or after the whey protein hydrolysis, to hydrolyse the lactose to galactose and glucose and synthesize galacto-oligosaccharides.

Appl. No. : 09/720,041  
Filed : April 2, 2001

50. (New) A process as claimed in claim 32 wherein the hydrolysate so prepared contains one or more of the bioactive peptides selected from the group consisting of AFE, LFSH (SEQ ID NO: 1), ILKEKH (SEQ ID NO: 2), LIVTQ (SEQ ID NO: 3), MKG, LDIQK (SEQ ID NO: 4), VF, ALPMH (SEQ ID NO: 5), VTSTAV (SEQ ID NO: 6), LHLPLP (SEQ ID NO: 7), LVYFPFGPIPNQLPQNIIP (SEQ ID NO: 8) and LFRQ (SEQ ID NO: 9).

51. (New) A non-bitter soluble whey protein hydrolysate produced by a process according to claim 32.

52. (New) A product as claimed in claim 51 wherein the degree of hydrolysis of the whey proteins is about 3 to 5%.

53. (New) A product as claimed in claim 51 wherein the mean particle size of the whey proteins in the product is less than about 30 microns.

54. (New) A product as claimed in claim 53 wherein said mean particle size is less than about 3 microns.

55. (New) A product as claimed in claim 51 which is substantially white in appearance.

56. (New) A product as claimed in claim 51 which also contains galacto-oligosaccharides.

Appl. No. : 09/720,041  
Filed : April 2, 2001

Ant #1  
57. (New) A product as claimed in claim 51 wherein one or more of said bioactive peptides is selected from the group consisting of AFE, LFSH (SEQ ID NO: 1), ILKEKH (SEQ ID NO: 2), LIVTQ (SEQ ID NO: 3), MKG, LDIQK (SEQ ID NO: 4), VF, ALPMH (SEQ ID NO: 5), VTSTAV (SEQ ID NO: 5), LHLPLP (SEQ ID NO: 7), LVYFPFGPIPNLPPQNIPP (SEQ ID NO: 8) and LFRQ (SEQ ID NO: 9).

58. (New) A food product containing a whey protein hydrolysate as claimed in claim 51.

Ant B2  
59. (New) Any one or any combination of two or more of the bioactive peptides selected from the group consisting of AFE, LFSH (SEQ ID NO: 1), ILKEKH (SEQ ID NO: 2), LIVTQ (SEQ ID NO: 3), MKG, LDIQK (SEQ ID NO: 4), VF, ALPMH (SEQ ID NO: 5), VTSTAV (SEQ ID NO: 6), LHLPLP (SEQ ID NO: 7), LVYFPFGPIPNLPPQNIPP (SEQ ID NO: 2) and LFRQ (SEQ ID NO: 2).

60. (New) A method of reducing systolic blood pressure in a subject which comprises administering to that subject an effective amount of a product as claimed in claim 51.

61. (New) A method of reducing systolic blood pressure in a subject which comprises administering an effective amount of a product according to claim 57.

62. (New) A method of reducing systolic blood pressure in a subject which comprises administering an effective amount of a peptide or a combination of peptides as claimed in claim 59.--

#### Remarks

During a telephone interview with the Examiner, the undersigned attorney was informed that the claim amendments requested in the Preliminary Amendment dated December 14, 2000, and the Amendment dated October 5, 2001 could not be entered, since they did not amend the